

100-111-15500

1        1.    A communication system for passing over a twisted  
2 wire pair network communication between a plurality of  
3 terminal devices, including one or more telephones, and a  
4 plurality of information services, including a telephone  
5 exchange and other information services, comprising:  
6 a main information interface coupled to the information  
7 services;  
8        a twisted pair wiring network coupled to the terminal  
9 devices and to the main information interface, including a  
10 plurality of active telephone pairs for passing voice  
11 signals between the telephone exchange and the one or more  
12 telephones;  
13        wherein the information interface includes circuitry  
14 for combining on the active telephone pairs (a) telephone  
15 signals in a telephone frequency band passing between the  
16 telephone exchange and the one or more telephones and (b)  
17 high frequency signals in a high band of frequencies higher  
18 than those of the telephone frequency band passing  
19 information between the other information services and one  
20 or more of the terminal devices.

1        2.    The communication system of claim 1 wherein the  
2 other information services includes a data network and the  
3 plurality of terminal devices includes a computer, and  
4 wherein the main information interface further includes a  
5 data hub for passing information between the computer and  
6 the data network.

1        3.    The communication system of claim 2 wherein the  
2 other information services further includes a television  
3 distribution service.

1        4.    The communication system of claim 2 wherein the  
2 twisted pair wiring network includes a plurality of cables  
3 coupled to the main information interface and to the  
4 terminal devices, and the cables form branching paths from  
5 the main information interface to the terminal devices, and  
6 the wiring network includes junctions at branch points of  
7 the cables for reducing degradation of signals in the high  
8 frequency band.

1        5.    The system of claim 1 wherein the plurality of  
2 terminal devices includes a television receiver and an  
3 associated remote control device, and the main information  
4 interface includes a video selector that is coupled to one  
5 of the information services and that includes a receiver for  
6 accepting control information sent from the remote control  
7 device over the twisted pair wiring network in the high  
8 frequency band and a transmitter for providing a television  
9 signal to the television receiver over the twisted pair  
10 wiring network in the high frequency band in response to the  
11 control information.

1        6.    The system of claim 5 wherein the video selector  
2 includes a tuner for selecting a television broadcast.

1        7.    The system of claim 6 wherein the video selector  
2 includes a computer coupled to a data network, and the  
3 control information includes information identifying a  
4 source of video information on the data network.

1        8.    The communication system of claim 1 further  
2 comprising privacy circuitry for preventing information  
3 passing between a terminal device and an information service  
4 from passing to another terminal device.

1        9.    The system of claim 8 wherein the plurality of  
2 information services includes a data network and the privacy  
3 circuitry includes a data hub that has a plurality of ports  
4 coupled to terminal devices and a port coupled to the data  
5 network and the data hub includes circuitry for inhibiting  
6 transmission of data received on one port that is coupled to  
7 a terminal device to ports coupled to other terminal  
8 devices.

1        10.   The system of claim 9 wherein the hub further  
2 includes circuitry for inhibiting transmission of data  
3 addressed to a terminal device that is received on the port  
4 coupled to the data network to ports other than the port to  
5 which the addressed terminal device is coupled.

1        11.   The system of claim 1 further comprising circuitry  
2 for reducing degradation of signals passing over the wiring  
3 network.

1        12.   The system of claim 11 wherein the circuitry for  
2 reducing degradation of signals includes circuitry for  
3 amplifying signals, and circuitry for equalizing signals.

1        13.   The system of claim 11 wherein the plurality of  
2 information services includes a data network, and the system  
3 further includes a data hub coupled through a plurality of  
4 ports to the wiring network, and the circuitry for reducing  
5 degradation of signals passing over the wiring network  
6 includes circuitry for reducing crosstalk between wire pairs  
7 coupled to the plurality ports.

1        14.   The system of claim 1 further comprising a media  
2 converter, wherein the media converter is coupled to an  
3 information service over a number of conductors and is  
4 coupled to the wiring network over a fewer number of  
5 conductors, and the media converter includes circuitry for

6 receiving information from the information service over the  
7 number of conductors and transmitting that information onto  
8 the wiring network over the fewer number of conductors.

1 15. The system of claim 14 wherein the media adapter  
2 converts 10BaseT signals received over two wire pairs to a  
3 signal transmitted onto one wiring pair.

1 16. A method for passing over a twisted wire pair  
2 network communication between a plurality of terminal  
3 devices, including one or more telephones, and a plurality  
4 of information services, including a telephone exchange and  
5 other information services, the method comprising:

6 passing voice signals between the telephone exchange  
7 and the one or more telephones over active telephone pairs  
8 of a twisted wire network which coupled the information  
9 services and the terminal devices;

10 combining on the active telephone pairs (a) telephone  
11 signals in a telephone frequency band passing between the  
12 telephone exchange and the one or more telephones and (b)  
13 high frequency signals in a high band of frequencies higher  
14 than those of the telephone frequency band passing  
15 information between the other information services and one  
16 or more of the terminal devices.